

What Is Claimed Is

1. A prosthetic tibial component for a  
5 prosthetic total knee joint, said component comprising  
two constructs, one being a metal base construct that  
engages the bone and the other being a polyethylene  
bearing construct that attaches to the metal base  
construct and articulates with a prosthetic femoral  
10 component on the opposing side of the joint, where  
said metal base construct is composed of two different  
metals, a first metal which engages the bone surface  
and a second metal which engages the polyethylene  
bearing construct, with the first metal being selected  
15 so as to provide a superior bone-engaging face, and  
the second metal being selected so as to provide a  
superior polyethylene-engaging face.

2. A prosthetic tibial component according to  
20 claim 1 wherein said first metal comprises titanium.

3. A prosthetic tibial component according to claim 1 wherein said first metal comprises a titanium alloy.

5 4. A prosthetic tibial component according to claim 1 wherein said first metal comprises tantalum.

10 5. A prosthetic tibial component according to claim 1 wherein said first metal comprises a tantalum alloy.

15 6. A prosthetic tibial component according to claim 1 wherein said first metal comprises a material which is highly biocompatible and which exhibits good bone ingrowth properties.

7. A prosthetic tibial component according to claim 1 wherein said second metal comprises CoCrMo.

8. A prosthetic tibial component according to claim 1 wherein said second metal comprises a cobalt based alloy.

5           9. A prosthetic tibial component according to claim 1 wherein said second metal comprises a stainless steel.

10           10. A prosthetic tibial component according to claim 1 wherein said second metal comprises a zirconium based alloy.

15           11. A prosthetic tibial component according to claim 1 wherein said second metal comprises a material which has relatively high hardness and which is scratch resistant.